



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,536	11/12/2003	Nicholas V. Perricone	00961-P0243B	6897
24126	7590	03/07/2006	EXAMINER	
ST. ONGE STEWARD JOHNSTON & REENS, LLC 986 BEDFORD STREET STAMFORD, CT 06905-5619			TANG, SON M	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

12

Office Action Summary	Application No.	Applicant(s)
	10/706,536	PERRICONE, NICHOLAS V.
	Examiner	Art Unit
	Son M. Tang	2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on amendment filed 11/25/05.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-29 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
--	--

DETAILED ACTION

1. Applicant's arguments, see amendment, filed 11/25/05, with respect to the rejection(s) of claim(s) 1-29 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Chambre, Ewart and Morag.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear of claimed "near *an axis* extending from said body..." whether the axis extending is a door or a chair. Please further define.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10-13, 15-22 and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambre [US 4,967,641] in view of Ewart [US 4,008,456].

Regarding claims 10-13, 15-22: Chambre discloses a threat detection interface system for providing an alert to an operator of a relating to a threat identified by a threat detection system comprising:

-a control interface (1) coupled to the threat detection system (2) for resolving a threat detection signal and determine direction and distance (intensity data I, col. 2, lines 37-38) of the identified threat relative to the operator, and a control signal (4n) generated the alert signal to an operator, wherein the alert device is in the form of stereophonic sound signals [see Figs. 1-3, col. 1, lines 47-56, col. 2, lines 24-39].

Chambre does not specific that said alert device is a plurality of vibratory units, **Ewart** teaches a tactile target alerting system comprising, a plurality of vibratory units (10) that worn on the operator's back via a vest/harness in order to wear on the operator's body [see Fig. 1-5, col. 1, lines 40-43, 50-62 and col. 2, lines 12-20], and the threat position indicating direction is mapped to the pattern of vibratory units [see Fig. 2, col. 2, lines 39-49], further more, the different amplitude frequencies of the oscillators accordance to target speed position is indicative of distance in such position indication [see col. 2, lines 16-20 and col. 1, lines 40-43]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to implement the vibratory units as suggested by **Ewart** into the alert device of **Chambre**, in order to free up the operator's hearing ability for other audible inputs such as voices communication, etc.

Regarding claims 24-26: **Ewart** teaches a flexible material garment vest for positioning the vibratory units to the user's torso (back) [see Fig. 3].

Regarding claim 27: **Ewart** further teaches that the threat is mapped to vibratory units 10positioned in an axis extending from said body of user to the threat [see Figs. 2-3, col. 2, lines 39-49].

Regarding claim 28: Chambre further teaches an intensity data which constitutes of variable frequency data depending on the distance from the threat to the object [col. 2, lines 16-18], and Ewart also teaches variable vibratory frequencies for target speed [col. 2, lines 19-20].

6. Claims 1-9, 14, 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambre in view of Ewart, and further in view of Morag [US 4,713,651].

Regarding claims 1-8: Chambre discloses a threat detection interface system for providing an alert to an operator of a relating to a threat identified by a threat detection system comprising:

-a control interface (1) coupled to the threat detection system (2) for resolving a threat detection signal and determine direction and distance (intensity data I) of the identified threat relative to the operator, and a control signal (4n) generated the alert signal to an operator, wherein the alert device is in the form of stereophonic sound signals [see Figs. 1-3, col. 1, lines 47-56, col. 2, lines 24-39].

Chambre does not teach that said alert device is a plurality of vibratory units, Ewart teaches a tactile target alerting system comprising, a plurality of vibratory units (10) that worn on the operator's back, via a vest/harness in order to wear on the operator's body [see Fig. 1-5, col. 1, lines 40-43, 50-62 and col. 2, lines 12-20], and the threat position indicating direction is mapped to the pattern of vibratory units [see Fig. 2, col. 2, lines 39-49], further more, the different amplitude frequencies of the oscillators accordance to target speed position is indicative of distance in such position indication [see col. 2, lines 16-20 and col. 1, lines 40-43]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to

implement the vibratory units as suggested by **Ewart** into the alert device of **Chambre**, in order to free up the operator's hearing ability for other audible inputs such as voices communication, etc.

Chambre and Ewart disclose all the limitations as described above, except for not specifically disclose that user is an operator of a vehicle and the said alert vibratory units indicate a three-dimensional location of the threat to the vehicle. **Morag** teaches a tactile alert device (12) comprises a plurality of vibratory units (10), which provides a location and direction of the identified threat in three-dimensional [see Fig. 1, col. 2, lines 32-50, 65-68 to col. 3, lines 1-5, 24-30]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to implement a vibrator alert device that have a three-dimensional location indication as taught by Moray into the combination system above, in order to detect the threat direction and distance coming from all angles around the vehicle.

Regarding claims 9 and 14: **Chambre, Ewart** disclose all the limitations as described above, except for not specific that said vibratory units is distributed on the operator's legs or in a seating device, however, **Morag** teaches an alternative that vibratory units can be mount on any other suitable mounting device. Therefore, it would have been obvious of one having ordinary skill in the art to recognize that the vibratory alert units physically contact operator in order to identify threat position, any appropriate body part of the operator can be a physically contact area, including the operator's legs or in an operator's seat.

Regarding claim 23: **Chambre** further discloses that said threat detection system is a RADAR system [see col. 1, lines 13].

Regarding claim 29: Chambre, Ewart and Morag disclose all the limitations as described above, Morag further teaches that variable pulse duration is indicative to distance from the threat to the object [see col. 2, lines 65-68 col. 3, lines 1-5].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Minter [US 6,097,315] and Takeyama [US 5,647,016] disclose direction and distance from the threat to aircraft.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son M. Tang whose telephone number is (571)272-2962. The examiner can normally be reached on 4/9 First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son Tang


BENJAMIN C. LEE
PRIMARY EXAMINER